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3 **Structure and Method For Fabricating a Bond Pad Structure**

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5 **Abstract**

6 A structure and method for an improved a bond pad structure. We
7 provide a top wiring layer and a top dielectric (IMD) layer over a semiconductor structure.
8 The buffer dielectric layer is formed over the top wiring layer and the top dielectric
9 (IMD) layer. We form a buffer opening in the buffer dielectric layer exposing at least of
10 portion of the top wiring layer. We form a barrier layer over the buffer dielectric layer, and
11 the top wiring layer in the buffer opening. A conductive buffer layer is formed over the
12 barrier layer. We planarize the conductive buffer layer to form a buffer pad in the buffer
13 opening. We form a passivation layer over the buffer pad and the buffer dielectric layer.
14 We form a bond pad opening in the passivation layer over at least a portion of the buffer
15 pad. We form a bond pad support layer over the buffer pad and the buffer dielectric layer.
16 We form a bond pad layer over the a bond pad support layer. The bond pad layer and the
17 bond pad support layer are patterned to form a bond pad and bond pad support.

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